

Klustis 53*

A DIRECT Relation, and Exact Map of the Harbour of NEW-CASTLE, near Tinmouth-Barre, since December, 1672.

When Eight Ships were overwhelmed by the Freshes, of which Six were (as not lying difficult) removed and cleared the first month; the other Two being great and deep laden, sunk in the best of the Harbour, were blown up with Gun-powder a few months after, with some particulars of what Change happened that Harbour thereupon to this present August following.

*816. m. 8
67.*

THE two Wrecks called Mr. Vicars, and Mr. Grays Ships, sunk where before was not above 10, 12, to 14 foot at low water; the one L lying on her broad side, the other K back-broken, fate right up, fast dockt, the Freshes running with such violence from Westward above, betwixt both Ships; and almost round about them such a whirle Neddee of water, as may be compared to an Oriocano of wind, had the first Month scoured a Channel on the West side of, and neer both these Wrecks, deep as they are marked 28, 30, to 33 foot also at low water, which Channel would have run lower, and so settled the Ships out of harms way, had they not at that depth met with a hard Cole-Mine; whereas at the East-side towards the Barre the old depth of 10, 12, to 14 foot at low water continued notwithstanding the greatest Storms, Surfs and Spring-Tides that happened out the Sea over the Barre, so neer the Wrecks for two months together after the Wrecks were so settled.

For it was the Freshes that overwhelmed these eight Ships in December, 1672. which no Storms ever did, whereof these two L, K sunk in the best of the Harbour, as appears by the two Light-houses C, D and the Barre M, for no Ships could steer into the Harbour by the lights, but must run hazard of being spoild, if not quite split upon the Wrecks, they being beset in such a manner as the Wreck L, defended K, from the Sea, East, and K the like for L, from the Freshes West, that they were absolutely fixt for Ages to continue, and that Harbour like to be lost for ever.

But since the Powder-blasts upon these two Wrecks L, K, a few alterations hath appeared near the Barre to the better, viz. the Wrecks lying so near the Hurd Sands N, caused such a strong Sluce betwixt that and the Wrecks, that it hath thrown the Hurd up further Southward, and consequently the River and the Barre broader than it was before at that place, which is the cause of this in publick. Some small alterations also it hath caused on sundry Sands up the River, of which every Wherry-man can inform, although by what course it hath taken since the blasts: All those places are like in a year or two's time, to return to its old station; for after the Ship L that had Lead in, was blown away, where at first it sunk was but 10, 12, to 14 foot, after thirty dayes were 28, 30, to 33 foot, and after the blast one third part of four hundred peeces Lead being taken up at about 28 foot deep, within twenty daies after it shallowed to 17 and 20 foot, and daily more, till all the rest of the Lead became buried.

These two Wrecks, one very near, and the other above 400 Ton full, laden with Coals, &c. weighed about eight hundred thousand pound weight apiece, besides the empty Ships, which by the Ship-Carpenters Rule of proportion ought with all her Masts, Anchors, Tackle, Rigging, &c. to weigh near as much as her Lading in weighty Commodities, if she be designed long liv'd; to these add so many hundred Ton of Water or Sea atop of them. The difficulty of conveying a Powder-chest to execute under Water at them on the out-side of the Ships, many, viz. their lying so near the Barre, that what by one constant course or other happening every year, in three quarters thereof it could not be performed; for three dayes before, and three dayes after every Spring-tyde, reckoning the day of the Moons change, there's half of the year gone, how often the Wind is East, North, or N, E in a year, either of those, with a reasonable gale, makes too great a swell thereabouts to spend Powder-chests below; how many stormy dayes are there usually in a year? when, and two dayes after every storm, no dealing thereabouts in that business; and worse than all this, rainy-weather sometimes three or four dayes, after one dayes showres, the Freshes will bring down so swift a Current, that over against Cliffords Fort, and the Figure 30, makes for a matter of a hundred and fifty fathom length, a gulf, swifter than that of Florida. To all these, one difficulty more as bad as the worst, the Neddee, or Whirle of Water, would without great pains and care overturn the Engine from its designed place, which sundry particular difficulties I mention, because some unskilful pretenders to this part of the Mathematicks, expected that so

great a weight and bulk before-mentioned, besides Lead and Stones, in one of them, should with one Chest containing seven barrels of Powder, be blown up from that depth, so easie and so high above Water, as the Boyes send up Kites, which could not have been hoped from seven thousand barrels, the Ships not being to be undermined, and the Powder-chests being fired at the sides of the Ships; but, were such a business to be done in the Waters of Thames, as many Chests might be spent, and Ships blown up in twenty dayes, as could be done at this Barre in a year at such weather as was there six months together; and every day one could be done to an empty Ship in such streams as the Thames, and where the Chest could be conveyed in the hold.

At any of which Weathers, or at the nearest of a Slack (if any ever be there) all former known waies would have failed, as divers (to any other purpose but vain expences) were endeavoured before my coming there; for no flying Fusee would burn to the bottom, but either bend or break, which must needs choak or drown the Wild-fire by the way; so that possibility it self became to be questioned, whether ever the Harbour were like to be cleared, or at the best to the cost of many thousands; thereupon the Magistrates sent up a Relation of the dangerous condition His Majesties Port of New-Castle was in; His Majestie was pleased to send unto them a new way to convey a Fire-Ball through a hollow Mast fastned to the Chest at the bottom of the Sea, the Chest shaped and ordered within and without in such a figure, as the designed place could be executed upon, as true under Water, as Guns can send out Bullets above, which hitherto was never known, or at least not known to be practised in any Country by any Nation whatsoever before; by virtue whereof the Author can destroy and remove all such Sincers, as was this and the last year, or at any time hereafter may be designed by the enemy, as certain (without undermining) as Rocks (which cannot be done but with undermining) can be blown up above ground, whether the Sincers are fill'd with Sand, Coals, Stones, Bricks, Morter, in a mass, or loose, the like of any other matter of weight whatsoever.

And in regard the appearance of Smoak above Water after the blast so far under, hath startled the inquisitive Chimist in point of nature, that the Sea-water being salt, and Gun-powder likewise salt, its Smoak also salt, must therefore certainly incorporate together, and none of that Smoak ever be seen above-water.

I have purposely placed this figure V to shew how the Water and Smoak, with pieces of the Ship did appear for a moment or two above water, a matter of a quarter of a minute after the Powder took fire below, without any contradiction to that rule of nature; for these six or seven barrels of Powder spent together under Water, produced no more Smoak or report above, than is usual from one Ordnance (although those that stood a mile off upon the Hills, felt the ground shake under them at the blow) and doubtless therefore by that natural rule, the Smoak must all have dissolved into the Salt-water, had the blast been deeper, or the quantity of Powder less, which being so much, and the motion so swift through such a shallow as twenty eight foot, some Smoak appeared above, by the same rule, as a Gnatt passing through a small flame, must dissolve in the flame; but by reason of its swift passage, part of him appears scorcht on th'other side. And for another Gentlemans opinion, to confirm the foregoing, that this lower Smoak W having not so swift a way as the uppermost X before it: where the report began was therefore the sadder colour, as if it had been dyed in the passage, is not so probable, but palpable to the contrary in my opinion; rather that the sadness of the Smoak about the Water W passing through the Ship, and up with the Coals, became blackish by the Coals; and nothing more certain, but that almost all the Smoak was mingled with the Sea; else had but half of it broke out above at X, it must consequently have shaken both South and North Shields.